

What is claimed is:

1 1. A pump, comprising:
2 a housing having an intake and an output;
3 a conductor movably disposed in the housing;
4 a first coil generating a magnetic force attracting the
5 conductor toward the output when electrified such
6 that fluid therebetween flows out of the housing; and
7 a second coil generating a magnetic force attracting the
8 conductor toward the intake when electrified such
9 that fluid therebetween flows between the conductor
10 and the output.

1 2. The pump as claimed in claim 1, wherein the fluid taken
2 into the housing is stored between the intake and the conductor
3 when the first coil is electrified.

1 3. The pump as claimed in claim 1, further comprising a
2 first base and a second base both disposed in the housing,
3 wherein the first coil is wound around the first base and the
4 second coil around the second base.

1 4. The pump as claimed in claim 3, wherein the first and
2 second bases are electrically insulated.

1 5. The pump as claimed in claim 3, further comprising an
2 entrance valve and a exit valve, the entrance valve disposed
3 between the intake and conductor, and the exit valve disposed
4 between the conductor and the output, wherein the entrance valve
5 opens and the exit valve closes when the first coil is

6 electrified, and the entrance valve closes and the exit valve
7 opens when the second coil is electrified.

1 6. The pump as claimed in claim 5, wherein the entrance
2 valve and the exit valve are both one-way valves.

1 7. The pump as claimed in claim 6, wherein each one-way
2 valve comprises an elastic member, a ball and a barricade
3 connected to the elastic member and the ball disposed
4 therebetween.

1 8. The pump as claimed in claim 7, wherein an end of the
2 elastic member connects to the conductor, and another end of the
3 elastic member is disposed between the first and second bases.

1 9. The pump as claimed in claim 8, wherein the elastic
2 member comprises a corrugated portion near where the first base
3 connecting to the second base.

1 10. The pump as claimed in claim 7, wherein the elastic
2 member connects to the second base.

1 11. The pump as claimed in claim 7, wherein the elastic
2 member comprises rubber.

1 12. The pump as claimed in claim 7, wherein the barricade
2 comprises an aluminum plate with openings.

1 13. The pump as claimed in claim 1, wherein the housing
2 comprises permeable material.

1 14. The pump as claimed in claim 1, further comprising a
2 conducting plate disposed in the housing.

1 15. The pump as claimed in claim 3, further comprising a
2 conducting plate disposed between the first and second bases.

1 16. The pump as claimed in claim 1, further comprising an
2 exit valve disposed at the output of the housing limiting fluid
3 flow to one direction.

1 17. The pump as claimed in claim 16, wherein the exit valve
2 comprises an elastic member, a ball and a barricade connected
3 to the elastic member and the ball disposed therebetween, and
4 an end of the elastic member connects to the conductor and
5 another end to the housing.

1 18. The pump as claimed in claim 17, wherein the elastic
2 member comprises a corrugated portion near where the elastic
3 member connects to the housing.

1 19. The pump as claimed in claim 17, wherein the elastic
2 member comprises rubber.

1 20. The pump as claimed in claim 17, wherein the barricade
2 comprises an aluminum plate with openings.

1 21. The pump as claimed in claim 1, further comprising an
2 entrance valve disposed at the intake limiting fluid flow to one
3 direction.

1 22. The pump as claimed in claim 21, wherein the entrance
2 valve comprises an elastic member, a ball and a barricade
3 connected to the elastic member and the ball disposed
4 therebetween, and the elastic member connects to the housing.

1 23. The pump as claimed in claim 22, wherein the elastic
2 member comprises rubber.

1 24. The pump as claimed in claim 22, wherein the barricade
2 comprises an aluminum plate with openings.